

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2008-0681; Directorate Identifier 2008-NE-13-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to all Turbomeca S.A. Arriel 1E2, 1S, and 1S1 turboshaft engines. The existing AD currently requires a one time inspection and torque check of a certain 3-way union plug installed on all fuel control units (FCUs). Since we issued that AD, the applicability has been reduced to certain FCUs and the referenced service bulletin has been updated with additional detailed information to identify the non-compliant "red disk" plug. This proposed AD would still require a one time inspection and torque check of the 3-way union plug, would require replacement of the plug before further flight if it is found to be non-compliant, and would prohibit installation of FCUs that have not passed the 3-way union plug inspection and torque check. We are proposing this AD to prevent fuel leaks, which could result in a fire and damage to the helicopter.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. **ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 05 59 74 40 00; fax: 33 05 59 74 45 15. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Rose Len, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; e-mail: rose.len@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2008-0681; Directorate Identifier 2008-NE-13-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### **Discussion**

On January 21, 2009, we issued AD 2009-03-04, Amendment 39-15805 (74 FR 7796, February 20, 2009), for all Turbomeca S.A. Arriel 1E2, 1S, and 1S1 turboshaft engines. That AD requires a one time inspection and torque check of a certain 3-way union plug installed on all FCUs. That AD resulted from Turbomeca S.A. informing the European Aviation Safety Agency (EASA) of a case of a "red disk" plug, adapted for bench testing, which was installed on the FCU on an engine and released for service operation. That engine experienced an in-service high pressure leak event (at the fuel pump outlet) due to cracking of this "red disk" plug. That leak could lead to in-flight flame-out and/or possibly a fire. We issued that AD to prevent fuel leaks, which could result in a fire and damage to the helicopter.

# **Actions Since Existing AD Was Issued**

Since we issued AD 2009-03-04, Turbomeca S.A. has identified FCUs that are not affected, which are FCUs that have a manufacturing date indicated on the identification plate later than March 31, 2008 and/or that have a latest repair/overhaul date recorded on the FCU log card later than March 31, 2008.

#### **Relevant Service Information**

We reviewed Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 73 0817, Version D, dated February 29, 2012. The MSB describes procedures for performing a one time inspection and torque check of a certain 3-way union plug installed on certain FCUs.

#### FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in a smaller population of products of the same type design.

# **Proposed AD Requirements**

This proposed AD would retain all of the requirements of AD 2009-03-04, (74 FR 7796, February 20, 2009), including those requirements related to a one time inspection and torque check. However, this proposed AD would reduce the affected population of FCU 3-way union plugs, require plug replacement before further flight if it fails the inspection, and would prohibit installation of FCUs that have not passed the 3-way union plug inspection and torque check.

## **Costs of Compliance**

Based on updated service information, we estimate that this proposed AD would affect about 179 engines installed on helicopters of U.S. registry. We also estimate that it would take about 0.5 work-hour per product to comply with this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$14 per engine. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$10,114. Our cost estimate is exclusive of possible warranty coverage.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator.

Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2009-03-04, Amendment 39-15805 (74 FR 7796, February 20, 2009), and adding the following new AD:

**Turbomeca S.A.:** Docket No. FAA-2008-0681; Directorate Identifier 2008-NE-13-AD.

#### (a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

This AD supersedes AD 2009-03-04, Amendment 39-15805 (74 FR 7796, February 20, 2009). This AD was prompted by Turbomeca S.A. informing us that FCUs manufactured, repaired, or overhauled after March 31, 2008, do not require inspection.

# (c) Applicability

This AD applies to Turbomeca S.A. models Arriel 1E2, 1S, and 1S1 turboshaft engines with fuel control units (FCUs) manufactured, repaired, or overhauled on or before March 31, 2008.

### (d) Unsafe Condition

Turbomeca S.A. informed the European Aviation Safety Agency (EASA) of a case of a "red disk" plug, adapted for bench testing, which was installed on the FCU on an engine and released for service operation. An engine experienced an in-service high

pressure leak event (at the fuel pump outlet) due to cracking of this "red disk" plug. This leak could lead to in-flight flame-out and/or possibly a fire. This AD was prompted by Turbomeca S.A. informing us that FCUs manufactured, repaired, or overhauled after March 31, 2008, do not require inspection. We are issuing this AD to prevent fuel leaks, which could result in a fire and damage to the helicopter.

## (e) Compliance

Comply with this AD within the compliance times specified, unless already done. Within 100 operating hours from the effective date of this AD, perform a one time inspection of the plug installed in the FCU 3-way union, part number 9 932 30 706 0.

- (1) If the FCU 3-way union plug is unpainted, verify the plug is torqued to between 1.3 and 1.5 daN.m, in accordance with Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 73 0817, Version D, dated February 29, 2012, before further flight.
- (2) If the FCU 3-way union plug has any red paint on it, replace it with a serviceable plug and torque the plug to between 1.3 and 1.5 daN.m, in accordance with Turbomeca S.A. MSB No. 292 73 0817, Version D, dated February 29, 2012, before further flight.

#### (f) Installation Prohibition

After the effective date of this AD, do not install any FCU manufactured, repaired, or overhauled on or before March 31, 2008, onto any Turbomeca S.A. model Arriel 1E2, 1S, and 1S1 turboshaft engine, unless the FCU 3-way union plug has passed the one time inspection and torque check required by this AD.

#### (g) Credit for Previous Actions

If you performed the inspections and corrective actions required by this AD using the original issue or any version up to and including Version D of Turbomeca S.A. MSB No. 292 73 0817 before the effective date of this AD, you have met the requirements of

this AD.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use

the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

(1) For more information about this AD, contact Rose Len, Aerospace Engineer,

Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England

Executive Park, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; e-

mail: rose.len@faa.gov.

(2) For service information identified in this AD, contact Turbomeca S.A., 40220

Tarnos, France; phone: 33 05 59 74 40 00; fax: 33 05 59 74 45 15. You may review

copies of the referenced service information at the FAA, Engine & Propeller Directorate,

12 New England Executive Park, Burlington, MA. For information on the availability of

this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on July 5, 2012.

Peter A. White,

Manager, Engine & Propeller Directorate,

Aircraft Certification Service.

[FR Doc. 2012-18050 Filed 07/24/2012 at 8:45 am; Publication Date: 07/25/2012]

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